

DP Barcode : D183447  
 PC Code No : 109303  
 EEB Out :

MAY 27 1993

To: George LaRocca PM13  
 Product Manager  
 Registration Division (H7505C)

From: Douglas J. Urban, Acting Chief  
 Ecological Effects Branch/EFED (H7507C)

Attached, please find the EEB review of...

Reg./File # : 352-515  
 Chemical Name : ~~Es~~FENVALERATE  
 Type Product : INSECTICIDE  
 Product Name : ASANA XL  
 Company Name : DUPONT  
 Purpose : REVIEW STUDIES SUBMITTED AS 6A2

Action Code : 405 Date Due : 01-20-93  
 Reviewer : MIACHEL REXRODE Date In EEB: 10-15-92

EEB Guideline/MRID Summary Table: The review in this package contains an evaluation of the following:

GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT	GDLN NO	MRID NO	CAT
71-1(A)			72-2(A) TECH.	42496202		72-7(A)		
71-1(B)			72-2(B) FORM.	42496201		72-7(B)		
71-2(A)			72-3(A)			122-1(A)		
71-2(B)			72-3(B)			122-1(B)		
71-3			72-3(C)			122-2		
71-4(A)			72-3(D)			123-1(A)		
71-4(B)			72-3(E)			123-1(B)		
71-5(A)			72-3(F)			123-2		
71-5(B)			72-4(A)			124-1		
72-1(A)			72-4(B)			124-2		
72-1(B)			72-5			141-1		
72-1(C)			72-6			141-2		
72-1(D)						141-5		

Y=Acceptable (Study satisfied Guideline)/Concur

P=Partial (Study partially fulfilled Guideline but additional information is needed)

S=Supplemental (Study provided useful information but Guideline was not satisfied)

M=Unacceptable (Study was rejected)/Nonconcur

DP BARCODE: D183447

CASE: 037980  
SUBMISSION: S427269

DATA PACKAGE RECORD  
BEAN SHEET

DATE: 10/15/92  
Page 1 of 1

\* \* \* CASE/SUBMISSION INFORMATION \* \* \*

CASE TYPE: REGISTRATION ACTION: 405 6(A)(2) ADVERSE DATA  
CHEMICALS: 109303 Fenvalerate  
109301 Fenvalerate

84.0000%  
08.4000%

ID#: 000352-00515 DUPONT ASANA XL INSECTICIDE  
COMPANY: 000352 E. I. DU PONT DENEMOURS AND CO, INC  
PRODUCT MANAGER: 13 GEORGE LARocca 703-305-6100 ROOM: CM2 204  
PM TEAM REVIEWER: ADAM HEYWARD 703-305-5021 ROOM: CM2 202  
RECEIVED DATE: 09/30/92 DUE OUT DATE: 12/09/92

\* \* \* DATA PACKAGE INFORMATION \* \* \*

DP BARCODE: 183447 EXPEDITE: Y DATE SENT: 10/14/92 DATE RET.: / /  
CHEMICAL: 109303 Fenvalerate  
DP TYPE: 001 Submission Related Data Package  
ADMIN DUE DATE: 11/08/92 CSF: N LABEL: N

ASSIGNED TO	DATE IN	DATE OUT
DIV : EFED	10/15/92	/ /
BRAN: EEB	10/15/92	/ /
SECT: RS1	/ /	/ /
REVR :	/ /	/ /
CONTR:	/ /	/ /

\* \* \* DATA REVIEW INSTRUCTIONS \* \* \*

Attached for your review 6(a)2 data for Asana XL to Daphnia magna.

\* \* \* ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION \* \* \*

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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**IMPORTANT**

6(A)2  
DATA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

MAY 27 1993

**MEMORANDUM**

**SUBJECT:** 6(a)(2); Follow-up to Submissions of Acute Daphnia magna Study

**FROM:** Anthony F. Maciorowski, Chief *A. F. Maciorowski*  
Ecological Effects Branch  
Environmental Fate and Effects Division (H7507C)

**TO:** George LaRocca, PM-13  
Registration Division

The registrant, DuPont, made a submission under FIFRA Section 6(a)(2) in reference to an acute Daphnia magna toxicity study on ASANA (esfenvalerate). The study (MRID: 41798301) was not scientifically sound and could not be used to satisfy registration requirements (problems with analytical measurements). In response to this Agency action, DuPont has submitted two new studies. One study measures effects of technical grade esfenvalerate on daphnids, while the other study is an evaluation of the toxicity of formulated ASANA XL on daphnids. The new data were reviewed as follows:

72-2: Freshwater Invertebrate Static-Renewal Acute Toxicity Study (Daphnia magna). MRID # 424926-01. This study is scientifically sound but does not meet Guideline Requirements. The study was conducted on the formulation and shows that ASANA XL is highly toxic to Daphnia magna with a 48-hour EC50 = 0.33 ug/L. The NOEC, after 48 hours, was calculated at 0.067 ug/L.

72-2: Freshwater Invertebrate Static-Renewal Acute Toxicity Test (Daphnia magna). MRID # 424926-02. This study is scientifically sound and will fulfill Guideline Requirements for an acute toxicity test using freshwater invertebrates. ASANA technical is highly toxic to Daphnia magna with a 48-hour EC50 = 0.24 ug/L. The NOEC, after 48 hours, was 0.044 ug/L.



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These studies show that the formulated product and technical active ingredient of ASANA are highly toxic to freshwater aquatic invertebrates (daphnids). This information will be added to the Agency's existing esfenvalerate data base but does not change EEB's level of concern for this compound. ASANA has the potential for toxic impact to aquatic ecosystems, as well as, possible indirect affects to certain waterfowl by a reduction in their aquatic food base (Rexrode 305-5578).